DATA SHEET

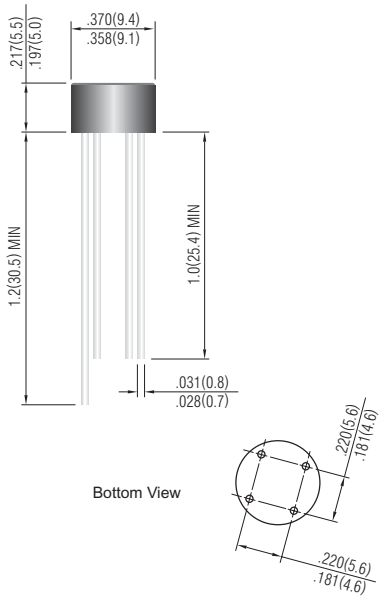
W005G~W10G

1.5 AMPERE SILICON MINIATURE SINGLE- PHASE BRIDGES

VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

AM

Unit: inch (mm)



FEATURES

- Ratings to 1000V PRV
- Surge overload rating: 30/50 Amperes peak
- Ideal for printed circuit board
- Reliable construction utilizing molded plastic
- Mounting position:Any

MECHANICAL DATA

Case:Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

Terminals: Leads solderable per MIL-STD-202, Method 208

Polarity :Polarity symbols marking on body.

Weight: 0.05 ounce, 1.3 grams

Available with 0.50 inch leads(P/N add suffix "S")

For Capacitive load derate current by 20%.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, Single phase, half wave, 60Hz.
For Capacitive load derate current by 20%.

	W005G	W01G	W02G	W04G	W06G	W08G	W10G	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T_A=50°C	1.5							A
Peak Forward Surge Current, 8.3ms singlehalf sine-wave superimposed on rated load	50.0							A
I^2t Rating for fusing (t < 8.35 ms)	10.0							A^2S
Maximum Forward Voltage Drop per Bridge Element at 1.0A	1.0							V
Maximum Reverse Current at Rated T_J= 25°C DC Blocking Voltage per element T_J=100°C	10.0 1.0							µA mA
Typical Junction capacitance per leg (Note 1) CJ	24.0							pF
Typical Thermal resistance per leg (Note 2) RθJA Typical Thermal resistance per leg (Note 2) RθJA	36.0 13.0							°C/W
Operating Temperature Range T_J	-55 to +125							°C
Storage Temperature Range T_A	-55 to +150							°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 X 0.47"(12 X 12mm) copper pads.

RATING AND CHARACTERISTIC CURVES

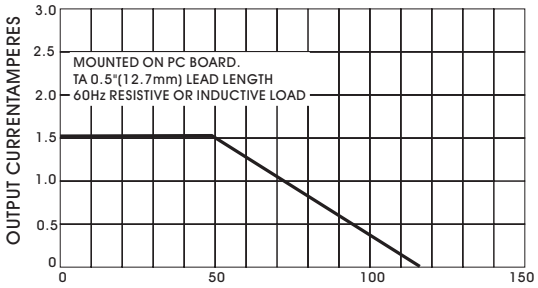


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

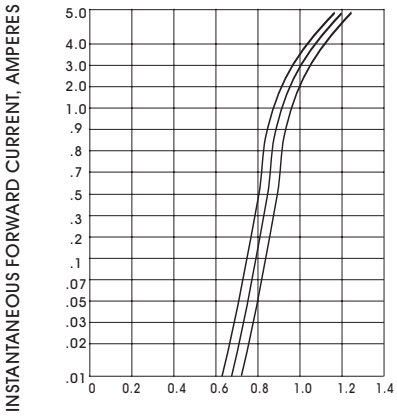


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS (25°C)

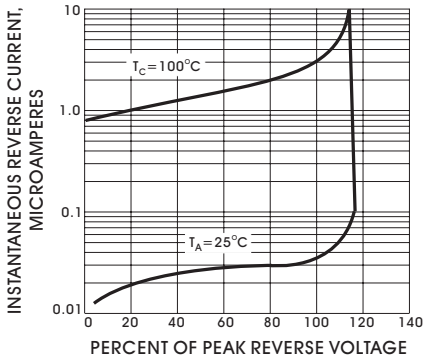


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

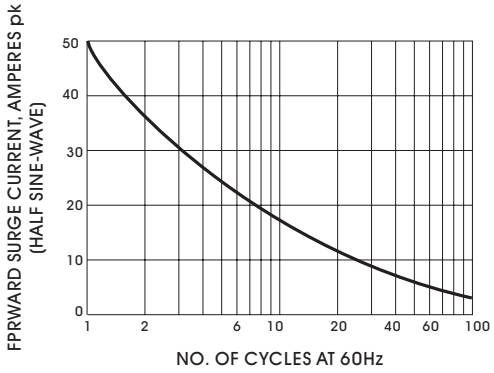


Fig. 4- MAXIMUM NON-REPETITEVE PEAK FORWARD SURGE CURRENT